Implementation of Design Scheduling

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# **Program & Project Mgt. Section**



- We are here to support the five year program and all active projects you have been assigned.
  - ✓ What can we do better?
  - ✓ What information do you need?

# **Agenda**

- Design Process
- Information Development Process
- Project Kick-Off Meeting
- Project Schedule

Break



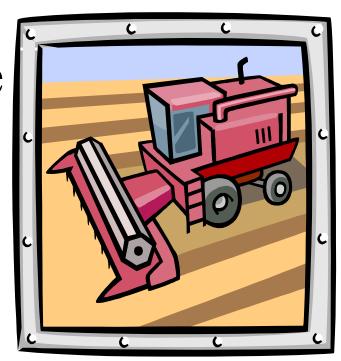
- Schedule Update Request Form (SURF)
- Project Management Reporting (PM)
- Active Project Status Report (APSR)

# ADOT Scheduling rules for Design Projects

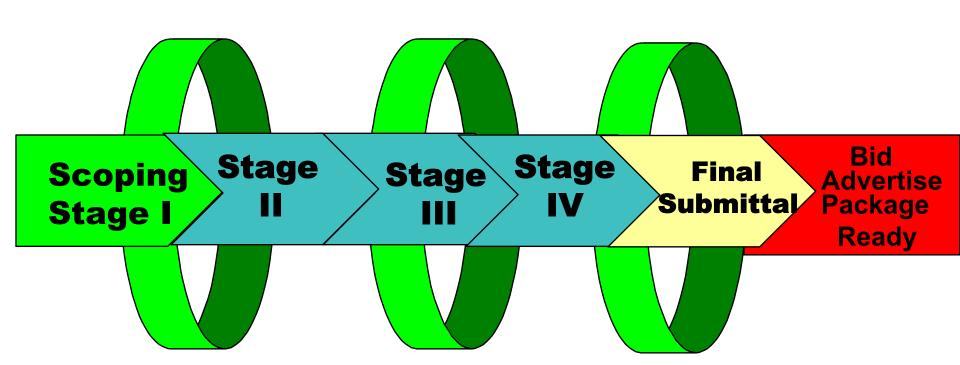
- Project: Unique Entity
  - Each project team is rarely made up of the same members
  - Each project has unique quality requirements:
     goals, specifications & contract language
  - Each project happens in a unique environment: unique site, unique stakeholders, unique timeframe
  - Each of the projects have unique expected results: quality and customer satisfaction

..... but they also have some similarities

 The life cycle of an ADOT Design Project is the progression along the design stages:



# **Project Design Process**



## Design Process

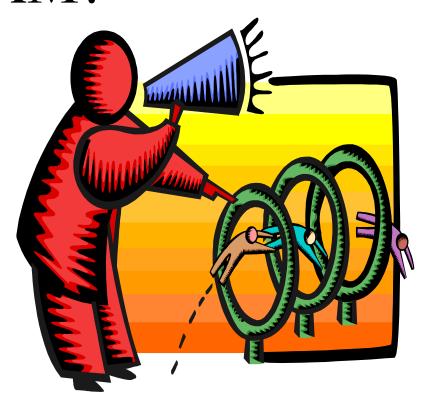
• Linear component:
Stages defined for measuring project performance and progress



• Circular component:
All people involved in a project, as well as the required deliverables that define the need for them to be part of the project TEAM

# What is to be delivered by the TEAM?

- This table is to be used WISELY as a guide.
- Remember to custom tailor it to your UNIQUE project
- This guide will help us not feel as if we are "jumping through hoops"



## Requirements: GUIDE FYI

#### DOCUMENTS REQUIRED FOR DESIGN PHASE SUBMITTALS

CONTRACT DOCUMENT ITEM	STAGE I REVIEW	STAGE II REVIEW	STAGE III REVIEW	STAGE IV REVIEW	FINAL PS&E
Face Sheet	-	P	F	F	F
List of Standard Drawings		-	P	F	S
Design Sheet & Index		91	P	F	S
Summary Sheets			P	F	S
Special Detail Drawings		l eno l	P	F	s
Typical Roadway Sections	I	P	F	F	s
Roadway Plan & Profile Shs	P	F	F	F	S
Parking Area Plans & Dtls		P	F	F	S
Drainage Plans & Details		P	F	F	S
Intersection Plans & Dtl		I	P	F	s
Interchange Plans & Dtls		P	F	F	s
Major Struct Plans, Dtls		I	P	F	s
Traffic Signal Plns, Dtls		I	P	F	S
Traffic Control Plns, Dtls		I	P	F	s
Sequence of Construction		I	P	F	s
Traffic Control Duration & Quantities	I	I	P	F	s
Signing & Pavement Mrkg Plans & Quantities			P	F	s
Lighting Plans & Details.			P	F	s
Landscape Plans & Details			P	F	S
Utility Reloc Plans, Dtls			P	F	S
Stormwater Pollution Pre- vention Control Plan			P	F	s
Special Drawings & Details			P	F	s
Roadway Cross Sections	baxbado	P	F	F	F
Summary of Final Earthwork Quantities	all de: erdsnee	P	F	F	F



Items must achieve the desired goal

Must be specific to the project's scope



NOW it makes sense.!!!!!!

CONSTRUCTION DOCUMENT ITEM	STAGE	STAGE	STAGE	STAGE	FINAL PS&E
	REVIEW	REVIEW	REVIEW	REVIEW	PS&E
Quantities & Combined Cost Estimate		P	P	F	F
Special Provisions			P	F	s
Construction Sehedule			P	F	s
DBE Participation Goals				P	F
Bidding Schedule			P	F	F
Final Design Calculations				F	s
Bound Survey Books	F	s			
Right-of-Way Requirements		P	F		
Drainage Report -Roadway		P	F	s	
Drainage Report -Structure		s			
Traffic Analysis Report		s			
Bridge Foundation Report		s			
Structure Selection Report		s			
Pavement Design Summary		s			
Geotechnical Report		s			
Environmental Permits		P	F		
Environmental Mitigation Measures	I	P	F		
Materials Design Memo		P	s		
Arizona State Plane Coordinates		s	F	F	s
-					
***					

LEGEND: I denotes initial concepts

P denotes preliminary, unchecked, excluding minor details

F denotes final, checked, all details and quantities S denotes sealed in accordance with technical registration requirements

The review stages roughly correspond to the following NOTE: completion levels of the Design Phase: Stage I: 15%; Stage II: 30%; Stage III: 60%;, Stage IV: 95%; Final PS&E: 100%.



2AXPL

44XPL

45XPL

**CS960** 

**CS998** 

CS999 6XPL

7XPL

### SCHEDULES MUST

40XPL **Design Start - Notice to Proceed 40XPL1 Project Start-up/Kick-off Mapping/Survey Complete** 41XES 41XPL **Design Stage I Submittal 42XGS** Geo. Test and Report Complete 43XVA **Value Analysis Recommendation Report Complete** 46XEP **Environmental Clearance Obtained** 42XPL **Design Stage II Submittal** 46XRW **Right-of-Way Clearance Obtained Traffic Control Plans Complete** 43XTD **43XPS Final Materials Report Complete** 43XPL **Design Stage III Submittal** 46XUR **Utility & Railroad Clearance Obtained** 

**Design Stage IV Submittal** 

**Bid Advertisement Date** 

Finalize PS&E

**Bid Award Date** 

Submittal of Final PS&E to C&S

**Bid Advertisement Package - Ready** 

**Est. Construction Duration Facilities Open to Traffic** 

**Pre-Design/Scoping Complete** 

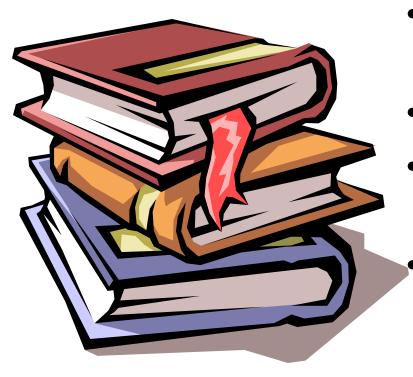
- 21 Project Milestones are KEY EVENTS for measuring the Design Progress.
- DO not change ID's or Descriptions
- Custom fit it to what you are doing

#### How to build a schedule !!!

- If you are a technical leader or an oncall consultant:
  - Establish what is your first project deliverable. This will define the design stage were it MUST be completed
  - EXAMPLE: Environmental Group
  - At Stage I you are required to have "Environmental Mitigation
    Measures" defined- initial concepts
    (Required design deliverable checklist)



# Break the project deliverable into tasks to be performed



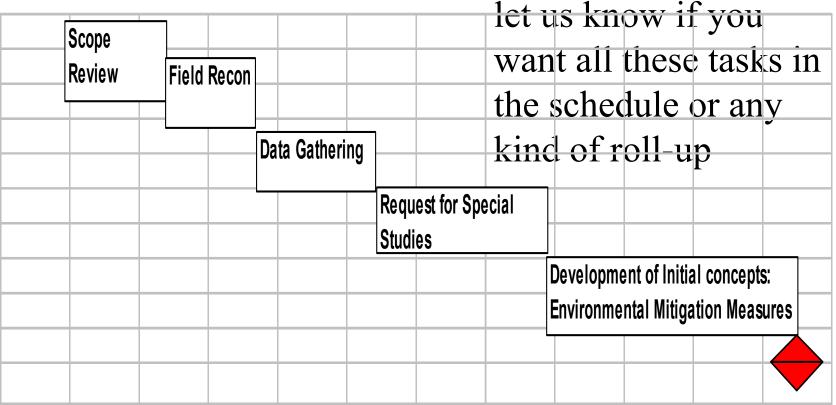
- For the Initial Mitigation Measures you need:
- 1. Scope review
- 2. Environmental Field Recon. & Data gathering
  - 3. Request need for Special Studies (Cultural, Archeological, Water, Noise....)

#### So now we have:

- Environmental Scope review
- Environmental Field Recon. & Data gathering
- Request need for Special Studies
- All these task when completed result in
  - Development of initial concepts: Environmental Mitigation Measures

#### What we have now is:

• Draft schedule. Please



41XPL Design Stage I Submittal

# What to do if I Need To Develop A Project Schedule?

- Scope review: what is the problem that you need to solve.
- Determine YOUR project deliverables
- Determine what sections have to be involved; create YOUR project team
- Request all team members to breakdown their deliverables into tasks (per stage)
- ALL (ADOT & Consultant tasks) must be accounted for in Draft schedule
- Tie all deliverables with the 21 milestones

### YOU are not alone

• We, PPMS will help you develop a roadmap (schedule) if you define for us your tasks and deliverables (per stage).

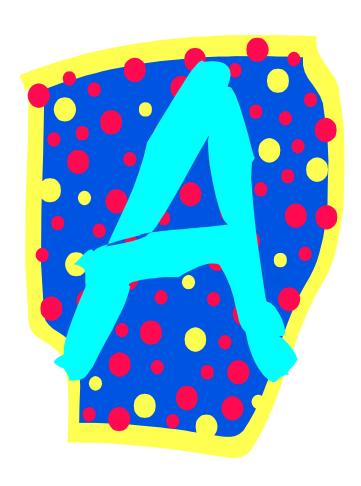
• This applies for technical leaders & ADOT project manager. If you are a Consultant and the development of the schedule is in your scope of work, please come to us for help, if you need it.

## Development of Schedule



- Now we can define the deliverables or Documents required at a detail level.
  - We can define this as the list of activities that are needed to achieve or complete them.
- Because many people are involved we want consistency and no room for miscommunication or problems..... please use

## Schedule Logic:



#### **Activity ID Code**:

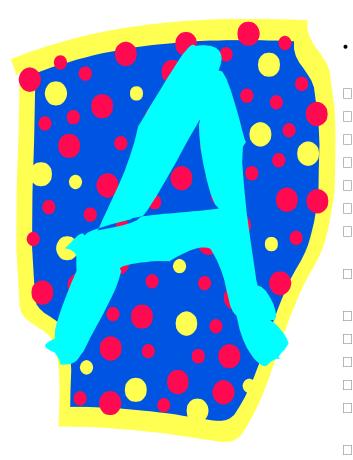
#### **Position 1**

- 2= pre-design phase,
- 4= design phase,
- 6=construction

### For the Design Phase, position 2 indicates the Stage.

- 1=Stage I (<> 15%),
- 2 = Stage II (>> 30%),
- 3= Stage III (<> 60%),
- 4= Stage IV (<> 95%),
- 5= 100% plans complete
  - 6= Multi stage activities

## Schedule Logic:

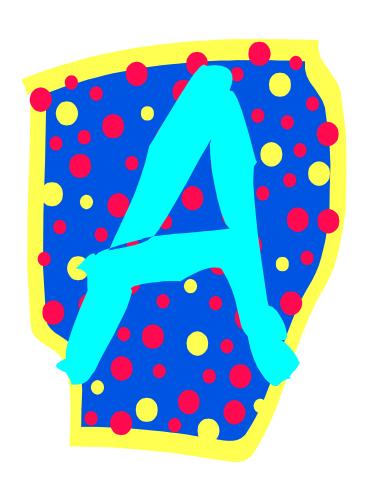


#### Position 3&4 (for pre-design and design)

- X = Milestone Completed
- 00= Project Coordination
- 01=Defining Scope of Work
- 02=Request for survey/test/permit/clearance
- 03=Design revise plans
- 04=Selection of consultants
- 07=Review/approve in house reports, plans, spec and estimates
- 08=Review/approve consultant reports, plans, spec and estimates
- 09=Rework to eliminate unsatisfactory performance
- 25=Perform material testing
- 61=Field Survey
- 71=Mapping
- 81=Field Survey (second one is needed because of complexity of requirements)
- 84=Perform Value Analysis
- 91=Consultant Contract Administration

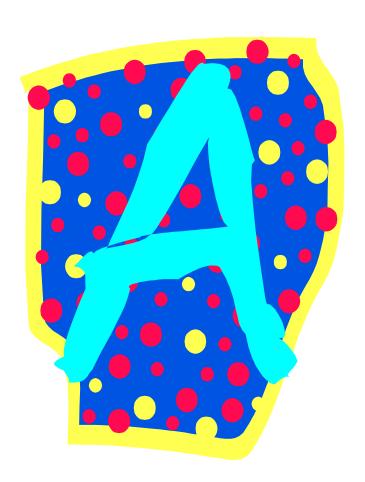
# Responsibility Group:

#### Position 5& 6 for pre-design and design)



ΑE	ROADWAY PREDESIGN, ADOT IN HOUSE
AEC	RDWY PRE-DSN BY CNLST
BD	BRIDGE DESIGN-ADOT
BDC	BRIDGE DESIGN BY CNSLT
CS	CONTRACTS & SPECIFICATIONS, ADOT IN-HOUSE
CSC	CONTRACTS & SPECS BY CNSLT
DC	DESIGN CONSULTANT
DD	DRAINAGE DESIGN-ADOT
DDC	DRAINAGE DESIGN BY CNSLT
DR	DISTRICT REVIEW
EC	ENGINEERING CONSULTANT SERVICES-ADOT
EP	ENVIRONMENTAL PLANNING, IN-HOUSE
EPC	ENVIRONMENTAL PLANNING BY CNSLT
ES	ENGINEERING SURVEYS SERVICES
ESC	ENGINEERING SURVEYS SERVICES BY CNSLT
GS	GEOTECHNICAL SERVICES / BRG FND-ADOT
GSC	GEOTECHNICAL SERVICES / BRG FND BY CNSLT
HP	ROADWAY DESIGN-ADOT
HPC	ROADWAY DESIGN BY CNSLT
PE	PROGRAM & PROJECT MANAGEMENT SECTION-ADOT
PL	PROJECT LEADER / MANAGER-ADOT
PLC	PROJECT LEADER / MANAGER-CONSULTANT
PM	PHOTOGRAMMETRY AND MAPPING-ADOT
PMC	PHOTOGRAMMETRY & MAPPING BY CONSULTANT
PS	PAVEMENT SERVICES-ADOT
PSC	PAVEMENT SERVICES BY CNSLT

## Responsibility Group:



RD ROADSIDE DEVELOPMENT-ADOT

RDC ROADSIDE DEVELOPMENT BY CONSULTANT

RW RIGHT-OF-WAY, IN-HOUSE RWC RIGHT-OF-WAY BY CNSLT

TD TRAFFIC DESIGN, ADOT IN-HOUSE

TDC TRAFFIC DESIGN BY CNSLT

TEC TRAFFIC ENGINEERING BY CONSLT

TS TESTING SERVICES-ADOT

UR UTILITIES & RAILROAD, IN-HOUSE

URC UTILITIES BY CNSLT

VA VALUE ANALYSIS - ADOT

VAC VALUE ANALYSIS - CONSULTANT

## Examples:

4100PL

\* Design Phase Stage I Project Coordination

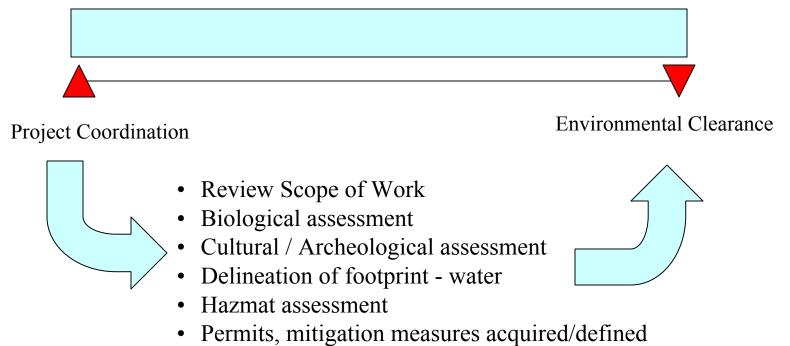
4204EPC

\* Design Phase Stage II Selection of Consultants Environmental Planning Group

**QUESTIONS???** 

# **Environmental Planning Activities**

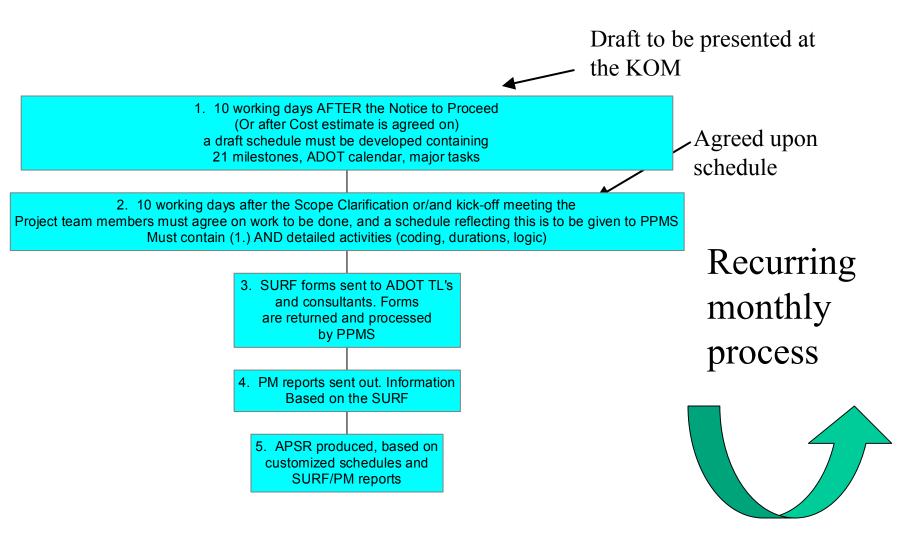
#### **Environmental Planning Time Line**



#### Right of Way Activities within the 21 milestones

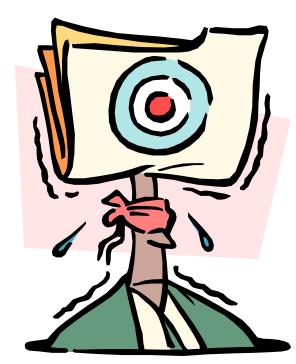
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2AXPL	Pre-Design/Scoping (Complete)	0	PL			Pre-Design/\$coping		: ::		Щ.	щ	щ.			لس	:		щ			ست	سب
40XPL	Design Start		PL			Design Start	(Contiblete)															
4000PE	Develop Draft Schedule for Project KOM		PE				raft Schedule	or Bro	icat	OM												
4001PE	Customize schedule		PE				nize schedule	oi Pioj	jectjr	CIVI												
40XPL1	Project Start-up/ Kick-off		PL				art-up/ Kick-off	: ! !														
4101RW	Preliminary Deliniation - Tittle Report Searce		RW	$\vdash$						<u> </u>			-		+	-	-	+	-	-	+	<del></del>
4111RW	Prepare Correspondance & Resolution to		RW				iminary Delinia															
4121RW	Appraisal for Preliminary approved area		RW			PI	epare Corresp							re								
41XES	Mapping/Survey Complete		ES				Appraisal for				rovec	area	3									
41XPL	Design Stage I (Complete)		PL				Mapping/Sur															
			GS	Н			Design Stage					+	-	-	+	:	-	+	-	-	+	-
42XGS	Geo. Test and Report (Complete)						Geo. Test and	l Repo	rt (Go	mple	ete)											
42XVA	Value Analysis (Complete)		VA				Value Analys															
4201RW	Determine R/W requirements & parcel		RW				Determi					& pai	rcel .	Affec	ted							
4211RW	R/W Base Plan Preparation		RW				R/W Ba				ion											
4221RW	Tittle Report Review		RW	Ш	1		Tittle R					+	-		+-	-	-	+	<u></u>	-	_	<u>:</u>
42XPL	Design Stage II (Complete)		PL				🔷 Design															
43XPS	Material Memo (Obtained)		PS				Materia															
43XTD	Traffic Control Plans (Complete)		TD				Traffic															
4301RW	Preliminary Deliniation of Partial completed		RW					iminary														
4311RW	Tax & Ownership Established (If new takes		RW	Ш			T	ax & O	wner	ship	Estal	olishe	ed (	f nev	v tak	ės)	<u>:</u>	$\perp$	<u> </u>			
43XPL	Design Stage III (Complete)		PL					esign S	Stage	III (C	omp	lete)										
4401UR	Utility Issues Id. & Relocation Schedule	55	UR						√ Ŭt					loca	tion	Sch	edul	ie de	∍fin∈	ed.		
4421RW	Appraisal Report Processing Completed	20	RW						prais													
4431RW	Acquisition & Condemnation Processing		RW					7			uisiti							ssir	ıa S	tart		
46XEP10	Env.Clearance documents:Tribal & Public	60	EP							- 1.1											ıblic	länds
4401RW	Acqusition & Condemnation Process PHas	20	RW	П						Ż	Acgu											
4411RW	Relocation & Agreement Established &	20	RW								Reloc											d
44XPL	Design Stage IV (Complete)	0	PL						$\mathcal{T}$		Desig							7		, ,,,,	7.7	-
45XPL	Final PS&E (Complete)	0	PL								Final						<b>'</b>					
4501RW	Finalize & Approval of Resolution &	15	RW							X	7 Fir	naliza	2 R	Δnnr	oval	of R		Juitic	n &	. Acc	ulisit	ion
46XEP	Environmental Clearance (Obtained)		EP	П										nenta								
46XRW	Right-of-Way Clearance (Obtained)		RW				Right-of-Way	/ Clear	ance	(Oht	ained							,		Ψ,		
46XUR	Utility and Railroad Clearance (Obtained)	0	UR			Litility	and Railroad					"		X								
CS960	C&S Finalize Bid Package & Clearances		CS				S Finalize Bid F						•	<b>X</b>	1							
CS998	Bid Advertisement Package-Ready		PE			•	Bid Adv						v '									
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6XPL	Bid Award Date		PE																	d Dat		3
7XPL	Facilities Open to Traffic		PL												acili						ا ت	
Start Date	19JUL02	<u> </u>	<del></del>	1.4	oric	A Doob Bohorso	<del></del>	<del></del>	_	-	-	_	-	-	HALL	inc 3	ΨPI	444	كلت	علبته	_	
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# **Information Development Process: RULES OF THE GAME**



## Value in the project schedule

- Schedule must be dynamic: reflect the progress of the project and the reality of its environment
- Schedule is only valuable if it accurately represent the project's uniqueness...... We need your updates
- Updates are requested from those who are responsible for task performance: SURF updaters; it's a monthly occurrence
- (SURF Schedule Update Request Form)



### **PM & SURF Calendar**

			May 2003			
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
				PM Reports Di	ue 5/5/03 COB	
4	5	6	7	8	9 (BTS)	10
	PM Reports Due COB	PPMS Enter PM Reports		Draft APSR		
				od - No P3 Sc	hedule Updat	
11	12	13	14	15	16	17
	Final APSR				SURF Distribution	
	Blackout					
18	19	20	21	22	23 (BTS)	24
			onsultant Scl lose Of Busir		APSR Data Date	
25	26	27	28	29	30	31
		Enter SURF Updates	Enter SURF Updates	Distribute PM Reports	PM Reports Due 6/3/03 COB	

PM & TL update the schedule

### PM & SURF Calendar

		•	June 2003	3	•	•	
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
1	2	3	4	5	6 (BTS)	7	
		Due 6/3/03 OB	PPMS Enter PM Reports		Draft APSR		
				P3 Black	l out Period		
8	9	10	11	12	13	14	
		Final APSR			SURF Distribution		
	P3 Black	out Period					PM &
15	16	17	18	19	20 (BTS)	21	the sch
	· · · · · · · · · · · · · · · · · · ·	eadsheets / C ay June 20 C			APSR Data Date		
22	23	24	25	26	27	28	
	Enter SURF Updates	Enter SURF Updates	Distribute PM Reports		ue 6/30/03 COB		
29	30						
	PM Reports DUE COB						

## **Data Date Definition**



#### **Data Date**:

The date used to analyze schedule data and report from it the project and activity status.

Data Date is equal to the close of business on the date it references.

Remaining Duration is the projected business day(s) required to complete the activity in relation to the Data date.

#### **DATA DATE**

**(DD)** 

Determination Of Remaining Duration Start

Early Finish (EF)

### **Activity**

**Fraction Of Activity Completed** 

Remaining Duration (RD) In Business Days

## **Data Date Examples**

In the process of creating the original schedule, the work to be performed can be defined by an activity.



#### **Example**

Activity is to start May 12<sup>th</sup>, 2003 The Activity's duration is projected to be 25 days.

Please calculate the Early Finish date. 6/16/2003

Note: Do not count holidays or weekends.

# **Data Date Examples**

#### Now let's update the activity.

Data Date is set at May 23<sup>rd</sup>, 2003, and FROM the Data Date we project that we need 14 days to complete the activity's work (RD). Please calculate now the Finish date.

#### Let's proceed:

Actual start = 05/12/03

Remaining Duration (RD) = 14 days of work left.

Finish Date? 06/13/03

Don't count: Holidays, Weekends, or Data Date



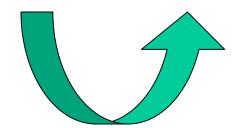
# Information Development Process:

 1. 10 working days AFTER the Notice to Proceed (Or after Cost estimate is agreed on)
 a draft schedule must be developed containing 21 milestones, ADOT calendar, major tasks

2. 10 working days after the Scope Clarification or/and kick-off meeting the Project team members must agree on work to be done, and a schedule reflecting this is to be given to PPMS Must contain (1.) AND detailed activities (coding, durations, logic)

- 3. SURF forms sent to ADOT TL's and consultants. Forms are returned and processed by PPMS
- 4. PM reports sent out. Information Based on the SURF
  - APSR produced, based on customized schedules and SURF/PM reports

Recurring monthly process



### **SURF Process**

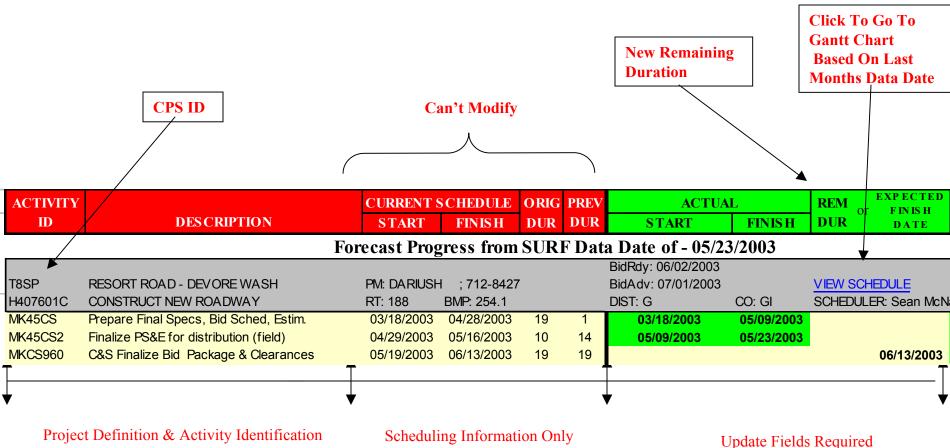


- Once schedule is customized, SURF forms are sent out to ADOT TL's and consultants. This form queries the technical leaders for status at the activity level.
- The person assigned to update the surf information for an activity will be the individual responsible for meeting the scheduled dates for that activity.

### **SURF Process**

- SURF users will capture the following information per activity (Fields ONLY to be modified - Use **BOLD** Font)
  - Actual Start (Have you started?)
  - Actual Finish (Have you finished?)
  - NEW remaining duration Based on Data Date OR Expected Date Of Finish
- Remember, the Planed Finished Date on the SURF form is calculated based on the previous month's Data Date.

# IMPROVED SURF FORM



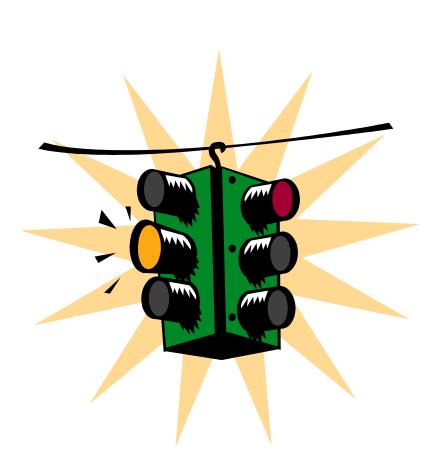
(-30 +60 Window Calculated From Data Date)

Based On Last Months Data Date

# **SURF EXAMPLES**

ACTIVITY		CURRENT S	SCHEDULE	ORIG	PREV	N ACTUAL		REM OF D FINISH
ID	<b>DES CRIPTION</b>	START	FINISH	DUR	DUR	START	FINISH	DUR DATE
	Forec	ast Progre	ss from SU	JRFI	)ata I	Date of - 05/23	3/2003	
						BidRdy:		
BF1E	MP 97.8 - MP 100.7 (SEGMENT IV)	PM: MICKELS	ON; 52062054	456		10/01/2003		VIEW SCHEDULE
H503706C	CONST NEW RDWY (E OF EXISTING)	RT: 191	BMP: 97.8			DIST: S	CO: GH	SCHEDULER: Sean Mc
VE44T1	Prepare Stage IV Traffic Deliverables	04/16/2003	06/11/2003	30	32	04/16/2003		10 06/09/2003
VE45T1	Prepare Final Traffic Deliverables	07/14/2003	08/08/2003	20	20			
						BidRdy:		
DF1E	MP 355 - 356 (HARDSCRABBLE RD)	PM: SCHELLI	HAMMER; 712	-8677		09/01/2004		VIEW SCHEDULE
H541201C	RECONSTRUCT ROADWAY & DRAINAGE	RT: 191	BMP: 355			DIST: H	CO: AP	SCHEDULER: Maria De
AL4303TD	Stage III Traffic Plans	04/16/2003	06/13/2003	59	34	04/16/2003		11 06/10/2003
						BidRdy:		
PA1E	SAN SIMON STREETS	PM: SCHELLH	HAMMER; 712	-8677		11/03/2003		VIEW SCHEDULE
	2" AC + SC (MILL CG SECTION)	RT: 10B	BMP: 378			DIST: S	CO: CH	SCHEDULER: Maria De
C74303TD	Stage III Trafic Plans	02/21/2003	05/15/2003	27	14	02/21/2003	05/15/2003	
C74403TD5	Stage IV Traffic Plans	05/27/2003	07/21/2003	39	39	05/19/2003		37 07/17/2003
						_		

# Do and Do not



- Green means go.
   Green heading columns are the only ones YOU need to update.
- Even if you have nothing to update, please send your form back to PPMS.

			May 2003			
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
				PM Reports Di	ue 5/5/03 COB	
4	5	6	7	8	9 (BTS)	10
	PM Reports Due COB	PPMS Enter PM Reports		Draft APSR		
			Blackout Peri			
11	12	13	14	15	16	17
	Final APSR				SURF Distribution	
	Blackout					
18	19	20	21	22	23 (BTS)	24
			onsultant Scl lose Of Busir		APSR Data Date	
25	26	27	28	29	30	31
		Enter SURF Updates	Enter SURF Updates	Distribute PM Reports	PM Reports Due 6/3/03 COB	

PM & TL update the schedule

Sunday		•				
Sunday		,	<b>June 200</b> 3	3		
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6 (BTS)	7
	=	Due 6/3/03 OB	PPMS Enter PM Reports		Draft APSR	
				P3 Black	out Period	
8	9	10	11	12	13	14
		Final APSR			SURF Distribution	
	P3 Black	out Period				
15	16	17	18	19	20 (BTS)	21
	<u>-</u>	adsheets / C ay June 20 C			APSR Data Date	
22	23	24	25	26	27	28
	Enter SURF Updates	Enter SURF Updates	Distribute PM Reports		ue 6/30/03 COB	
29	30					
	PM Reports DUE COB					

# **SURF Update**

#### **Environmental Planning Consultant**

#### **Objective:**

Status activities based on Data Date of 5/23/2003

#### **Specifics:**

4443EP – ADOT signs May DEA and submits to FHWA

-Finished, Signed and submitted by May 16th, 2003

4453EP – FHWA signs May DEA

- All signatures were documented. Start May 19<sup>th</sup>; completed and sent to ADOT EEP May 20<sup>th</sup>, 2003

4473EP Public hearing meeting is to be held on June 12<sup>th</sup>

4483EP 30-Day public Hearing period ends should be a task, 15 day duration starting at date of Public hearing meeting.

# **SURF**

#### **Environmental Planning Consultant**

ACTIVITY		CURRENT SCHEDULE		UKIG	PKEV	ACTUA		KENI EXPECTE		
ID	DESCRIPTION	START	FINISH	DUR	DUR	START	FINISH	DUR OF D FINISH DATE		
						DATA I	DATE= 0	5/23/2003		
SA1F	B-8 - I-8	PM: BRUDER	; 712-6836			BidRdy: 11/07/2003 BidAdv: 12/05/2003		VIEW SCHEDULE		
H577407C	WIDENING	RT: 195	BMP: 23			DIST: Y	CO: YU	SCHEDULER: Maria De		
HE4443EP	ADOT signs May DEA and submits of	05/12/2003	04/29/2003	2	2	05/12/2003	5/16/2003			
HE4453EP	FHWA signs May DEA	04/30/2003	05/06/2003	5	5	05/19/2003	05/20/2003			
HE4473EP	Public Hearing		06/04/2003	0	0			06/12/2003		
HE4483EP	30-Day public comment period eds.		06/23/2003	0	0			15		
HE4503EP	LSD submits July Final EA to ADOT	06/24/2003	07/07/2003	9	9					
HE4513EP	ADOT submits comments on July Fir	07/08/2003	07/14/2003	5	5					
HE4523EP	LSD submits final EA to ADOT	07/15/2003	07/21/2003	5	5					
HE4433EP	LSD submits May DEA to ADOT	05/12/2003		0	0	05/12/2003				
HE4463EP	30-Day Public comment period begin	05/15/2003		0	0					

**REM** 

# **SURF Update**

#### **Geo-Technical**

#### **Objective:**

Status activities based on Data Date of 5/23/2003 Update SA1F only (project in slide before)

#### **Specifics:**

 $42XGS-Foundation\ Report$  This report was started 4/23/2003 It is taking longer than previously forecasted, It will be done 25 days from Data Date

No other progress has been made on any of the other Geo-Tech activities.



ACTIVITY		CURRENT S	SCHEDULE	ORIG	PREV	ACTUA	L	<b>REM</b> or	FINISH
ID	<b>DES CRIPTION</b>	START	FINIS H	DUR	DUR	START	FINIS H	DUR O	DATE
	For	ecast Prog	gress from	SURI	F Dat	a Date of - 05/23	3/2003		
						BidRdy: 11/07/2003			
SA1F	B-8 - I-8	PM: BRUDER	; 712-6836			BidAdv: 12/05/2003		VIEW SCH	<u>EDULE</u>
H577407C	WIDENING	RT: 195	BMP: 23			DIST: Y	CO: YU	SCHEDULE	R: Maria Deet
HE42XGS10	Foundation Report	04/23/2003	05/30/2003	39	24	04/23/2003		25	06302003
TR1F	SAN PEDRO RIVER BRIDGES	PM: ITTY	; 712-8718			BidRdy: 01/02/2004		VIEW SCHI	<u>EDULE</u>
H629201C	SCOUR RETROFIT & PRESERVATION	RT: 10	BMP: 306			DIST: S	CO: CH	SCHEDULE	R: Art Magan
KG4202GS	Request Geo, Survey Right of Entry from EP.	03/31/2003	05/19/2003	36	16	03/31/2003			
KG4203GS	Geotechnical Borings	05/20/2003	05/27/2003	5	5				
KG42XGS	Geotechnical Lab Testing & Report	05/28/2003	06/10/2003	10	10				

# SURF Update Right-Of-Way

#### **Objective:**

Status activities based on Data Date of 5/23/2003.

#### **Specifics:**

46XRW The Right of Way Clearance will be obtained when ADOT RW receives the final requirements from ADOT PM and Consultant. No progress has been made, still awaiting info. Remaining duration still is 82 days from data date.

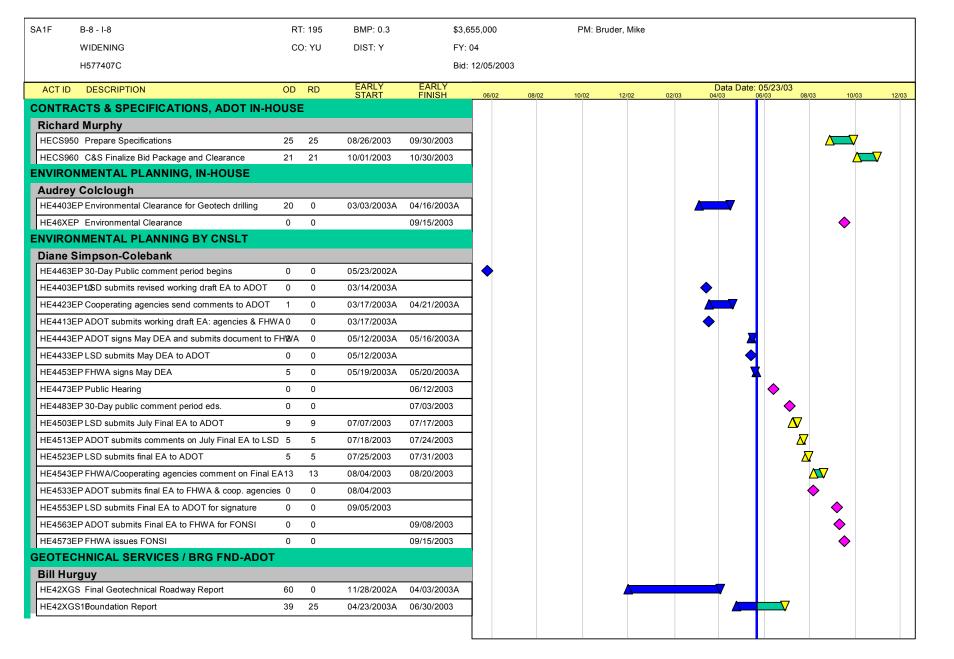
No other progress has been made on any of the other Right-Of-Way activities.



ACTIVITY		CURRENT S	SCHEDULE	ORIG	PREV	ACTUA	L	REM EXPECTED OF FINISH
ID	DESCRIPTION	START	FINIS H	DUR	DUR	START	FINISH	DUR DATE
	F	orecast Prog	gress from	SUR	F Dat	a Date of - 05/23	3/2003	
						BidRdy: 11/07/2003		
SA1F	B-8 - I-8	PM: BRUDER	; 712-6836			BidAdv: 12/05/2003		VIEW SCHEDULE
H577407C	WIDENING	RT: 195	BMP: 23			DIST: Y	CO: YU	SCHEDULER: Maria Deet
HE46XRW	Right of Way Clearance	11/28/2002	10/08/2003	120	82	11/28/2002		82
TP1F	MAINLINE AVE E 1/2 - AVE B	PM: BRUDER	; 712-6836			BidRdy: 02/02/2004		VIEW SCHEDULE
H577403C	CONST 4 LANE DIVIDED HIGHWAY	RT: 195	BMP: 5.5			DIST: Y	CO: YU	SCHEDULER: Maria Deek
IX4603RW	Prepare R/W Plans	07/09/2003	08/05/2003	20	20			
IX46KBRW	Prepare Parcel Plats, Legal Documents	07/16/2003	08/05/2003	15	15			
IX4603RW1	Prepare Delineation	07/09/2003	08/05/2003	20	20			



# Gantt Chart Using View Schedule Link On SURF



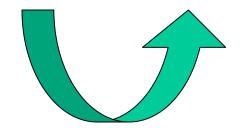
# Information Development Process:

 10 working days AFTER the Notice to Proceed (Or after Cost estimate is agreed on)
 a draft schedule must be developed containing
 milestones, ADOT calendar, major tasks

2. 10 working days after the Scope Clarification or/and kick-off meeting the Project team members must agree on work to be done, and a schedule reflecting this is to be given to PPMS Must contain (1.) AND detailed activities (coding, durations, logic)

- SURF forms sent to ADOT TL's and consultants. Forms are returned and processed by PPMS
- 4. PM reports sent out. Information Based on the SURF
  - APSR produced, based on customized schedules and SURF/PM reports

Recurring monthly process





# **PM Reports**

- The Project Manager Report is distributed to the project managers. This is the opportunity for project managers to review the project data before it is reported to the public.
- Report contains modifiable and Read only fields.
- All changes should be made in **BOLD** font or hand written in red ink.
- Headings should be changed with caution. Cost & Bid Date changes must be approved by the PRB.
- Heading information should be changed on the first page only and made in bold letters.

# **PM Reports**

- First Page Data Fields:
  - Activity ID & Description for the project's 21 major reported dates.
  - Planned Dates are the original target dates of the customized schedule.
  - Act/Cur Sch. Dates is the current "Can Finish Date" or Actual
     Completion Date (Followed By An "A")
  - Variance Workdays is the difference between Act/Cur Sch date & the Planned date.
  - Comments will appear on the PM report only for that activity.
  - Comments to appear on the APSR are added to the comments on the C&S Finalize Bid Package & Clearances (CS960) activity.

PM / PROJ.	NAME:	ROBERGE / PHX - CORDES JCT, PU	JMP STATION		
TYPE OF W	ORK:	SAFETY IMPROVEMENTS			View Schedule
SCHEDULER:		MARIA DEEB-ROBERGE			
CPS ID:	TO1F	DISTRICT:	E	ITEM NO.:	
ROUTE:	17	COUNTY:	MA	CONSULTANT:	
BMP:	199	COG:		ORIGINAL PROGRAM COST:	\$0
LENGTH:	0.1	TRACS NO.:	H602001C	CURRENT PROGRAM COST:	\$381,000
		PROGRAM FY:	04	BID ADVERTISEMENT DATE:	07/07/03

ctivity ID	Activity Description	*Planned Dates	Act/Cur Sch. Dates	Variance Workdays	Comments
2AXPL	Pre-Design/Scoping (Complete)				
40XPL	Design Start	06/25/02	06/25/02A	0	
40XPL1	Project Start-up/Kick-off	08/28/02	08/28/02A	0	
41XES	Mapping/Survey (Complete)	09/04/02	09/04/02A	0	
41XPL	Design Stage I (Complete)				
42XGS	Geo. Test and Report (Complete)				
42XVA	Value Analysis (Complete)				
46XEP	Environmental Clearance (Obtained)	02/07/03	02/07/03A	0	
42XPL	Design Stage II (Complete)				
46XRW	Right-of-Way Clearance (Obtained)	05/20/03	04/29/03A	15	
43XTD	Traffic Control Plans (Complete)	02/10/03	02/10/03A	0	
43XPS	Material Memo (Obtained)				
43XPL	Design Stage III (Complete)	11/12/02	11/12/02A	0	
46XUR	Utility and Railroad Clearance (Obtained)	05/01/03	03/31/03A	23	
44XPL	Design Stage IV (Complete)	02/10/03	02/10/03A	0	
45XPL	Final PS&E (Complete)	05/01/03	05/05/03A	-2	
CS960	C&S Finalize Bid Package & Clearances	06/02/03	06/02/03	0	
CS998	Bid Advertisement Package Ready		06/02/03		
CS999	Bid Advertisement Date	07/07/03	07/07/03	0	
6XPL	Bid Award Date	08/04/03	08/04/03	0	
7XPL	Facilities Open to Traffic	12/02/03	12/02/03	0	
	Estimated Construction Duration (Workdays)		40		
	TOTAL FLOAT		0		

#### **Project Cost Estimates and Comments**

1 Toject Cost Estimates and Comments							
Cost Estimates	Amount (\$)						
Initial Estimate							
Design Stage II							
Design Stage III							
Design Stage IV							
Agreement Estimate							
Pid Award Amount							

Comments to appear in the APSR

Phase II of the Water Pump Safety Improvements will design safety improvements for the remaining 27 stations of the Phoenix area.

Phase I has sucessfully been completed, C&S will complete project's BID package ready by target date. Phase II is in first stages of Cost Proposal negotiation and project team building.

For PPMS use only: NOTE CHANGES IN COMMENTS

Based On The Current Data Date

# **PM Reports**

#### Second Page Data Fields:

- Heading information is the same as page 1 and should not be changed on this page.
- Activity ID & Description for activities within the -30 + 60 day window based upon the Data Date.
- Planned Start is the current "Can Start Date"
- <u>Planned Finish</u> is the current "Can Finish Date".
- Actual Start is the field which states or asks for an actual start date.
   Only to be filled in when the activity has started.
- Actual Finish is the field which states or asks for an actual finish date. Only to be filled in when the activity has completed.
- OD is the Original Duration for the activity.
- <u>RD</u> is the Remaining Duration for the activity and can be updated.
- Responsibility (Resource/Org) is the Technical Lead/Resource responsible for updating the activity status.

SCHEDULE	R:	MARIA DEEB-ROBERGE			
CPS ID:	TO1F	DISTRICT:	Е	ITEM NO.:	0
<b>ROUTE:</b>	17	COUNTY:	MA	CONSULTANT:	0
BMP:	199	COG:	0	ORIGINAL PROGRAM COST:	\$0
LENGTH:	0.1	TRACS NO.:	H602001C	CURRENT PROGRAM COST:	\$381,000
		PROGRAM FY:	04	BID ADVERTISEMENT DATE:	07/07/03

View Schedule

#### DETAIL PROJECT SCHEDULE (DATA DATE +60/-30 DAYS): DATA DATE = 05/23/2003

SAFETY IMPROVEMENTS

ROBERGE / PHX - CORDES JCT, PUMP STATION

	Activity		CURRENT	CURRENT	ACTUAL	ACTUAL			RESPONSIBILITY	
FLOAT	I.D.	DESCRIPTION	START	FINISH	START	FINISH	OD	RD	(RESOURCE / ORG)	
	4431RW	RW Clearance process complete	04/22/03	04/29/03	04/22/03	04/29/03	7	0	Martha Harrell	
	46XRW	Right-of-Way Clearance (Obtained)	04/29/03	04/29/03	04/29/03	04/29/03	0	0	Martha Harrell	
	4501PLC	Final Safety Plan development: PS&E	02/11/03	05/05/03	02/11/03	05/05/03	30	0	Maria Deeb-Roberge	
	45XPL	Final PS&E (Sealed)	03/28/03	05/05/03	03/28/03	05/05/03	25	0	Maria Deeb-Roberge	
	45XPLC	Final PS&E Submittal	05/05/03	05/05/03	05/05/03	05/05/03	0	0	Maria Deeb-Roberge	
	46XEP10	Re-assessed Environmental Clearance (As	02/10/03	05/10/03	02/10/03	05/10/03	22	0	Thor Anderson	
0	CS960	C&S Finalize Bid Package & Clearances	05/02/03	06/02/03	05/02/03		21	5	Steve Beasley	
0	CS998	Bid Advertisement Package-Ready	06/02/03	06/02/03			0	0	Maria Deeb-Roberge	
0	CS999	Bid Advertisement Date	07/07/03	07/07/03			0	0	Maria Deeb-Roberge	

#### PROJECT ISSUES AND ACTIONS

Environmental Clearance received 2/04/2003

Purchae of new Right of Way was required at the Peoria Pump Station due to channel improvement require re-design and re-location of the drainage channel.

R/W coordinator expects to have R/W clearance by June 30th, 2003

1/22/2003 due to task modification #1 (improvement of the drainage channel at the Peoria Pump station due to concrete desintegration at the surface due to water flow)

new R/W is required as well as a TCE. TCE is required for geotechnical investigation & blue staking to happen. (expect to be completed by 2/11/03 with geo & blue-staking)

Upgrades to include ventilation and fire detectors are not sufficient to comply with NFPA code 820 which states that if a modification is performed, then that modification

must bring facility up to Fire code standards. Meeting with District and FireMarshall is to happen so resolution is given to the issue.

Complying with ADOT new Asbestos policy, requires that testing is performed at 22 stations & determine if at any site abaitment has to occur before construction

#### PROJECT HISTORY

PM / PROJ. NAME:

TYPE OF WORK:

# **Project Float Time**



## Project Total Float Description:

• The number of days your project is ahead or behind schedule.

- > Positive Float = Ahead Of Schedule
- ➤ Negative Float = Behind Schedule

### **Customized Projects Total Float Time**

Project Manager: (PM Name)

The following is a list of your projects in Float Days sequence. The negative float time may be attributed to one of the following:

- 1. The schedule has not been updated properly.
- 2. The project is really behind schedule and may need to be reviewed and appropriate action taken.
- 3. You may have to go to the PRB to get approval for additional funding or extend the Bid Advertisement Date.

If you feel the report is in error please let us know immediately.

CPSI	Project Name	Type Of Work	Scheduler	Rout	Begining Mile	Bid Date	Total Float
UV1	BULLHEAD STREETS	SPOT MILL & ARFC	Dean Mees	95	243.9	03/01/200	-13
UP1	JCT SR 260 & SR 87 C AMP VERDE	ADD LEFT AND RIGHT URN	Dean Mees	87	278.5	02/01/200	-8
HX1	NEEDLES - COURTWRIGH T	3" AC + FC	Dean Mees	95	226.0	07/01/200	1
UB1	TUSAYAN STREETS	RR 3" + ARFC	Dean Mees	64	233.0	02/01/200	2
EG1	STONEMAN LAKE - FLAG STAFF	RECST R/W FENCE	Dean Mees	17	312	07/01/200	13
IC1E	TUBA CITY - COAL MIN E RD	ARFC OVERLAY	Dean Mees		322.0	02/07/200	14
DD1	ADAMANA FRONTAGE	2" OVERLAY	Dean Mees	40	303.6	05/01/200	17
HI1E	SILVER CREEK - BERNA RDINO	RR 3"AC + SC	Dean Mees	80	379.0	01/03/200	21
IA1E	LANDFILL RD - STAND ARD PARALLEL	2" AC + 1/2" AR-ACFC	Dean Mees		318.0	11/01/200	32

Thursday, January 17, 2002

# **Total Float**

- Reasons for Total Float to be negative:
  - 1. Activities have not been correctly updated.
  - 2. Underestimated time & resources for a specific activities.
  - 3. Unforeseeable conditions have made the project late.
  - 4. Corrective action needs to be taken to get back on schedule.
- This development process emphasizes the need for all updates.

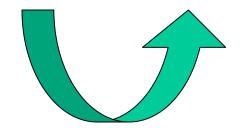
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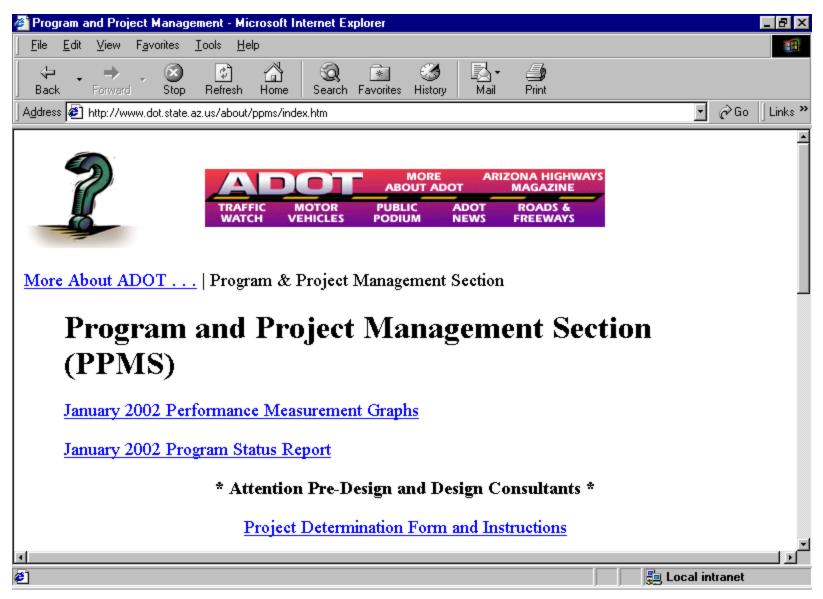
2. 10 working days after the Scope Clarification or/and kick-off meeting the Project team members must agree on work to be done, and a schedule reflecting this is to be given to PPMS Must contain (1.) AND detailed activities (coding, durations, logic)

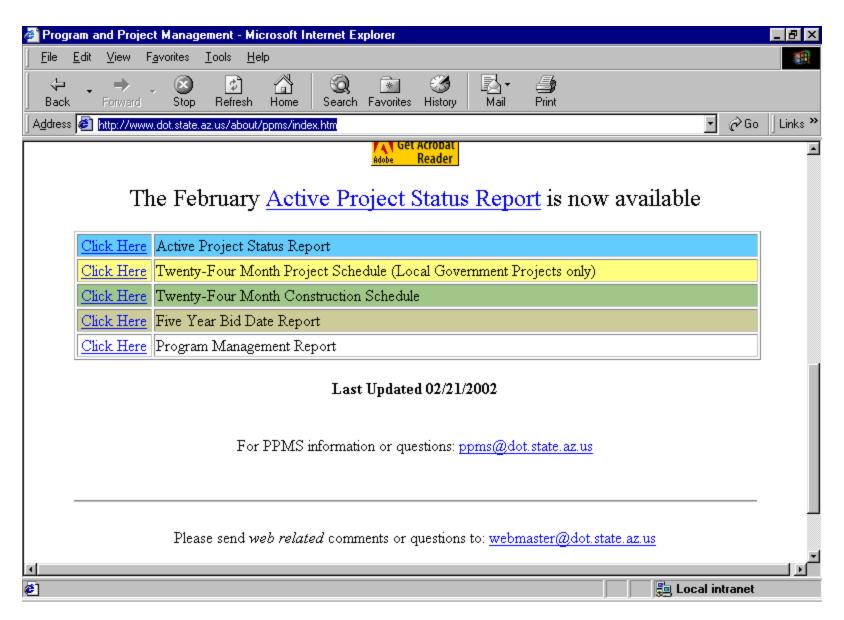
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  - APSR produced, based on customized schedules and SURF/PM reports

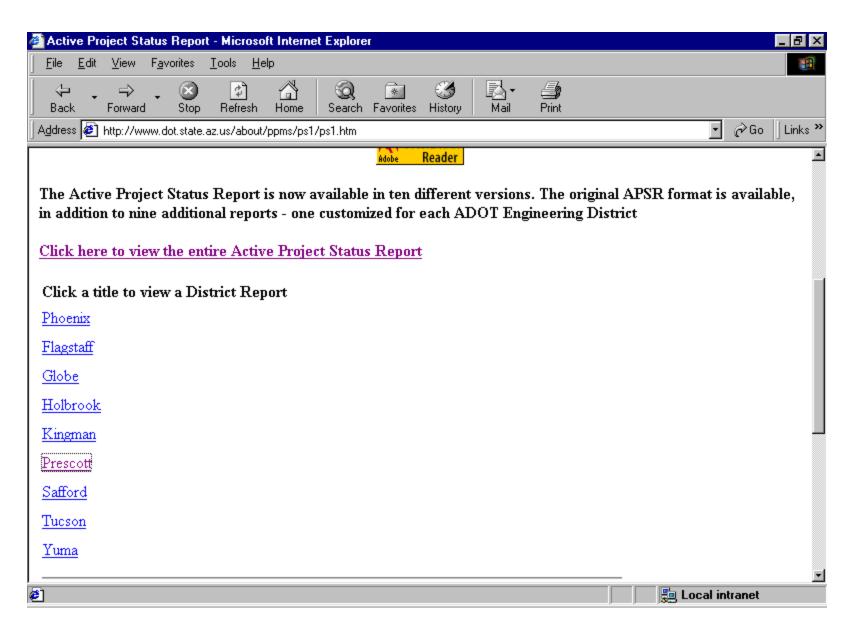
Recurring monthly process



#### http://www.dot.state.az.us/about/ppms/index.htm







# **APSR Report**

- The Active Project Status Report (APSR) contains schedule milestone data for each programmed project.
  - 1. Projects Added.
  - 2. Projects Deleted.
  - 3. Projects Rescheduled.
  - 4. Design Projects without Construction.
  - 5. Projects which Failed to Advertise.
  - 6. All Projects are sorted by Bid Ready Date.
  - 7. Project Index sorted by Route and Milepost.

# What's In It For Me!

- Facilitates communications.
- Tells you if you are going to finish on time.
- Provides history for planning future projects as well as a background of effective corrective measures which have been implemented.
- It's a learning ground for better planning and risk management.
- Unbiased measurement of individual and team performance.

# Quality / Assurance Questions & Answers

- 1-on-1 SURF & PM training available.
  - Call Sean McNabb (712-8827) to schedule a time.
- Feedback and suggestions on forms/presentation are welcome.

# Appendix

### PROGRAM & PROJECT MANAGEMENT SECTION Schedulers

205 South 17<sup>th</sup> Avenue, Mail Drop; 620E, Room 361<u>E</u> Phoenix, Arizona 85007 Fax 712-3207

<u>Name</u>	Telephone No.
Bagnall, John	(602) 712-8721
Baune, Roger	(602) 712-8764
Dayzie, Misty	(602) 779-7529
Deeb-Roberge, Maria	(602) 712-8785
Magana, Art	(602) 712-7563
McNabb, Sean	(602) 712-8827
Mees, Dean	(602) 712-8716
Silva, Leonel	(602) 712-8657
Wise, Elissa	(602) 712-8715

June 2003							
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
1	2	3	4	5	6 (BTS)	7	
		PM Reports Due 6/3/03 COB			Draft APSR		
0		Lio	4.4		P3 Blackout Period		
8	9	10	11	12	13	14	
		Final APSR			SURF Distribution		
	P3 Black	P3 Blackout Period					
15	16	17	18	19	20 (BTS)	21	
	SURF Spreadsheets / Consultant Schedules due Friday June 20 Close Of Business.				APSR Data Date		
22	23	24	25	26	27	28	
	Enter SURF Updates	Enter SURF Updates	Distribute PM Reports	PM Reports Due 6/30/03 COB			
29	30 PM Reports DUE COB						

July 2003							
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
		1	2	3	4 (BTS)	5	
		PPMS Enter PM Reports		Draft APSR			
				out Period			
6	7	8	9	10	11	12	
		Final APSR					
		ckout Period					
13	14	15	16	17	18 (BTS)	19	
20	21	22	23	24	25	26	
					SURF Distribution		
27	28	29	30	31			
SURF Spreadsheets / Consultant Schedules due Friday August 1 Close Of Business.							

	August 2003						
Sunday	Monday	Tuesday	Wednesday		Friday	Saturday	
					1 (BTS)	2	
					APSR Data Date		
3	4	5	6	7	8	9	
	Enter SURF Updates	Enter SURF Updates	Distribute PM Reports	PM Reports Due 8/11/03 COB			
10	11	12	13	14	15 (BTS)	16	
	PM Reports DUE COB	Enter PM Reports		Draft APSR			
					edule Updates		
17	18	19	20	21	22	23	
	Final APSR				SURF Distribution		
_	Blackout						
24	25	26	27	28	29 (BTS)	30	
	SURF Spreadsheets / Consultant Schedules due Friday August 29 Close Of Business.				APSR Data Date		
31							

September 2003							
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
	1 Holiday	2	3	4	5	6	
		Enter SURF Updates	Enter SURF Updates	Distribute PM Reprots	PM Reports Due 9/9/03		
7	8	9	10	11	12 (BTS)	13	
	PM Reports Due 9/9/03		PPMS Enter PM Reports		Draft APSR		
		T			t Period		
14	15	16	17	18	19	20	
		Final APSR			SURF Distribution		
		it Period					
21	22	23	24	25	26 (BTS)	27	
	SURF Spreadsheets / Consultant Schedules due Friday September 26 Close Of Business.				APSR Data Date		
28	29	30					
	Enter SURF Updates	Enter SURF Updates					

# **PPMS** Receiving Procedures

After developing your schedule Backup the project and e-mail it to ADOT Scheduling using the following procedure.

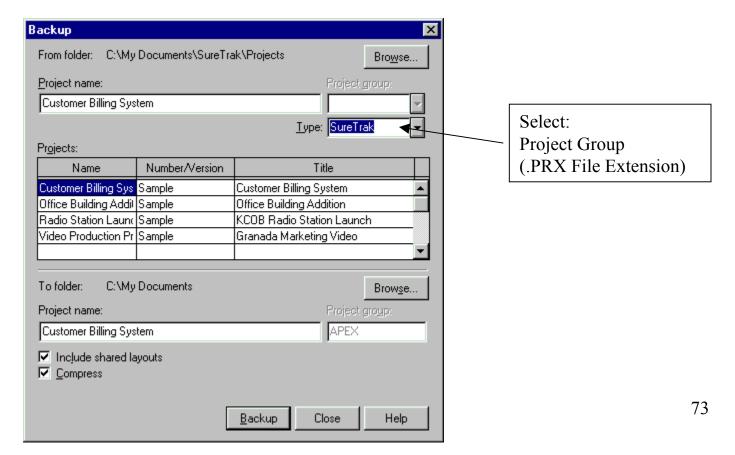


### Backup/Restore

**Problem:** A project needs to be backed up so I can send it via email. How do I use SureTrak to create a back up of a project?

**Solution:** The steps to create a back up of project using SureTrak Project Manager is as follows:

- 1. Open SureTrak Project Manager.
- 2. Select Tools, Project Utilities, Backup. SureTrak's Backup window will appear.



### **Backup/Restore**

3. In the backup window, there are several sections that need attention prior to backing up the project. The first being the "From folder". The "From folder" is asking you to point it to the folder that contains the project you wish to back up. You can change the location by hitting the "Browse.." button. You may need to change the "Type" that SureTrak is looking for. Send a single file, change the type to "Project Groups" type project and it will create a single file for easier sending through email.

Project Group type projects, once backed up, will have a ".prx" extension.

The next area that you will need to set is the "To folder". The "To folder" is asking you where you want SureTrak to put the backed up project. You can change the location by hitting the **"Browse.."** button.

- 4. If layouts associated with reports that the recipient will need to run, check the "Include shared layouts" option.
- 5. Check the "Compress" option to reduce the total file size.
- 6. Click "Backup". You can now attach this project to email.

Note: Topic Activities are not included in the backup and will not be restored. ADOT Scheduling does not use Hammocks. If sending a schedule, please name the project using distinctive or incremental method. For example: TI01, TI02, AD01, AD02, etc.

# Design Document Checklist